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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,038	03/18/2004	Tomohiro Mori	119134	5624

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EXAMINER

STALLARD, JOSEPH A

ART UNIT	PAPER NUMBER
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3715

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/803,038	Applicant(s) MORI ET AL.	
	Examiner J. Andrew Stallard	Art Unit 3715	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 8/2/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/18/2004</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 101

Claims 17-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 17-18 merely claim a data signal. Claims 19-20 merely claim a computer program. Computer programs are non-statutory when claimed as descriptive material *per se*. See MPEP 2106.IV.B.1. Data signals are non-statutory for the same reason.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Pearce et al. (US 6,211,882).

Claim 1: Pearce discloses a method for generating an image in a virtual space seen from a predetermined viewpoint, comprising: judging whether to start a motion of a first object placed in the virtual space; if it is judged to start the motion of the first object, automatically controlling the motion of the first object in a predetermined moving direction (*col. 3, 30-33; The polygons making up an object (100) are moved according to the motion vectors (102, 104, and 106).*); if it is judged to start the motion of the first object, locating a plurality of effect objects at a front side in the moving direction from a location of the first object (*col. 4, 29-34; The effect objects (pixels, such as 310) are located at a front side in the moving direction from a location of the first object.*); and making the plurality of effect objects sequentially not displayed in proximate order from the location of the first object at time that it is judged to start the motion of the first object (*col. 4, 29-34; The effect objects (310) are sequentially not displayed as the polygon (302) moves past the sampling points.*).

Claim 2 and 9: Pearce discloses that the making the plurality of effect objects sequentially not displayed includes making the plurality of effect objects located at a rear side in the moving direction from the location of the first object, sequentially not displayed according to the controlling the motion of the first object (*col. 4, 29-34; The blur occurs at the rear side of the first object as it moves in the moving direction.*).

Art Unit: 3715

Claim 3 and 10: Pearce discloses changing color information of the plurality of effect objects in accordance with the motion of the first object being controlled (*col. 4, 29-49; The pixel (310) color is changed according to the position of the first object (302).*).

Claim 4: Pearce discloses that the changing the color information includes changing the color information so as to decrease a transparency degree as a distance between the location of the first object and each of the plurality of effect objects becomes shorter (*col. 4, 41-44; The coverage factors of the polygons that intersect a sampling point are used to determine the color and intensity of the sampling point, so as a polygon moves away from the sampling point, the polygon factors less into the color and intensity of the sampling point. In other words, as the distance between an effect object and the first object becomes greater (i.e. as the polygon moves in the moving direction), the transparency degree increases. Conversely, the transparency degree increases when the distance becomes shorter.*).

Claim 5: Pearce discloses that the locating the plurality of effect objects includes: determining a plurality of locations where the first object is to pass with the motion of the first object controlled (*Fig. 1 shows a plurality of locations (initial, t1, t2 and final positions) where the first object (100) is to pass according to the motion (102, 104 and 106).*); and locating at each of the plurality of locations determined, an object showing a posture of the first object at time that the first object arrives at the each of the plurality of locations, as each of the plurality of effect objects (*Fig. 1; The triangle (100) is lo*).

Claim 6: Pearce discloses that the plurality of effect objects are plate-like objects on which an image is mapped, the image being seen from a viewpoint different from the

Art Unit: 3715

predetermined viewpoint (*In other words, the plurality of effect objects are the textured polygons (plate-like objects on which an image is mapped) and the image (texture) is seen from a different viewpoint because not all polygons and the textures on them are directly facing the "camera."*), and the locating the plurality of effect objects includes locating the plurality of effect objects so as to intersect the moving direction by a predetermined angle (*col. 1, 56 - col. 2, 7; All of the polygons (effect objects) that intersect the sampling point while moving in the moving direction are located.*).

Claim 7 and 12: Pearce discloses that the first object comprises a plurality of action-receiving parts (*col. 3, 24-26; The object in motion comprises a plurality of polygons with motion vectors (action-receiving parts).*); a plurality of pieces of effect object information is provided to each of the plurality of action-receiving parts (*col. 3, 65 – col. 4, 4; A plurality of sampling points and pixels (pieces of effect object information) are associated with each of the plurality of polygons (action-receiving parts).*), the judging whether to start the motion of the first object includes judging to start the motion of the first object if any one of the plurality of action-receiving parts satisfies a predetermined action-receiving condition (*The action-receiving polygons are set into motion by a predetermined action-receiving condition, such as the start of the animation of the 3D object.*); and the locating the plurality of effect objects includes locating the plurality of effect objects based on the plurality of pieces of effect object information corresponding to the action-receiving part that is judged to satisfy the action-receiving condition (*col. 4, 29-34; As described above (col. 3, 24-26), a plurality of effect objects correspond to each action-receiving part. The action-receiving parts move when they satisfy the*

Art Unit: 3715

action receiving condition, so the plurality of effect objects are located based on the effect object information for each part when the part is judged to satisfy the condition.).

Claim 8: Pearce discloses a method for generating an image in a virtual space seen from a predetermined viewpoint, comprising: judging whether to start a motion of a first object placed in the virtual space; if it is judged to start the motion of the first object, automatically controlling the motion of the first object in a predetermined moving direction (*col. 3, 30-33*); if it is judged to start the motion of the first object, locating an effect object at a front side in the moving direction from a location of the first object (*col. 4, 29-34*); and making the effect object sequentially not displayed from a side proximate to the location of the first object at time that it is judged to start the motion of the first object (*col. 4, 29-34*).

Claim 11: Pearce discloses that the changing the color information includes changing the color information so as to increase a transparency degree at a near side to the location of the first object and to decrease the transparency degree at a far side from the location of the first object (*col. 4, 41-44*).

Claims 13-14: Pearce discloses an information storage medium having information recorded thereon, when the information is loaded onto an operating apparatus, the information making the operating apparatus execute the method as claimed in claims 1 and 8 (*col. 3, 1-2; Fig. 11 shows a computer useful for implementing the method, having an information storage medium (1110) and the operating apparatus (1102).*).

Claim 15: Pearce discloses an image generation device (*col. 3, 12; Computer graphics applications*) for generating an image in a virtual space seen from a predetermined

Art Unit: 3715

viewpoint, comprising: a judging section for judging whether to start a motion of a first object placed in the virtual space; a motion control section for, if it is judged to start the motion of the first object, automatically controlling the motion of the first object in a predetermined moving direction (*col. 3, 30-33*); a locating section for, if it is judged to start the motion of the first object, locating a plurality of effect objects at a front side in the moving direction from a location of the first object (*col. 4, 29-34*); and a nondisplay section for making the plurality of effect objects sequentially not displayed in proximate order from the location of the first object at time that it is judged to start the motion of the first object (*col. 4, 29-34*).

Claim 16: Pearce discloses an image generation device (*col. 3, 12*) for generating an image in a virtual space seen from a predetermined viewpoint, comprising: a judging section for judging whether to start a motion of a first object placed in the virtual space; a motion control section for, if it is judged to start the motion of the first object, automatically controlling the motion of the first object in a predetermined moving direction (*col. 3, 30-33*); a locating section for, if it is judged to start the motion of the first object, locating an effect object at a front side in the moving direction from a location of the first object (*col. 4, 29-34*); and a nondisplay section for making the effect object sequentially not displayed from a side proximate to the location of the first object at time that it is judged to start the motion of the first object (*col. 4, 29-34*).

Claims 17-18: Pearce discloses a data signal embodied in a carrier wave, comprising information used for executing the method as claimed in claims 1 and 8 (*col. 3, 12; col. 12, 25-29*).

Art Unit: 3715

Claim 19-20: Pearce discloses a program, when the program is loaded onto an operating device, the program making the operating device execute the method as claimed in claims 1 and 8 (*col. 12, 25-29*).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Andrew Stallard whose telephone number is (571) 272-2685. The examiner can normally be reached on 9:15 am to 6:45 pm - Mon - Fri (1st Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica S. Carter can be reached on (571) 272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


MONICA CARTER
SUPERVISORY PATENT EXAMINER

Application/Control Number: 10/803,038

Page 9

Art Unit: 3715

J. Andrew Stallard

Examiner

Art Unit 3715

Monica S. Carter

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SUPERVISORY PATENT EXAMINER